

AMENDMENT OF THE SPECIFICATION

Please amend the third paragraph on page 8 to read as follows:

Lump ore feed is stored for a few months in stockpiles S before being reclaimed and stored in a bin 26. The stockpile storage is for a period of one month to several months, as necessary. This procedure allows the release of internal stresses, increasing the efficiency of the subsequent pre-drying, which has the objective of avoiding mechanical weakness of the lump ore during thermal shock and reduction at low temperatures. In accordance with the present invention, hot waste off-gas 25 when removed from the reformer heating chamber, may be passed through a heat recovery system, such as a boiler, is compressed, and passed through the storage bin 26 to heat the ore therein, where the hot waste off-gas 25 is to at least about 200 degrees C, but preferably to at least 300 degrees C. The off-gas is introduced to the bin at a controlled temperature. The temperature of the off-gas can be tempered by introduction of cooling air 28, as necessary. After pre-drying of the iron ore charge material, it is transported through a thermally insulated charging system 30 to the furnace, and is then introduced to the upper portion of the furnace to form the burden. A dynamic seal arrangement may be utilized to provide thermal insulation. Moisture in the lump iron ore is a problem which must be and is overcome by preheating and pre-drying the iron ore, which reduces the water content of the pellet or lump from about 4% to less than 0.5%.